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| 10/540,477 | 06/23/2005 | Yoshinori Matsui | 2005_0813A | 2984 |
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| EXAMINER VAUGHAN, MICHAEL R | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/540,477

Applicant(s)

MATSUI, YOSHINORI

Examiner

MICHAEL R. VAUGHAN

Art Unit

2431

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/19/08 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

The instant application having Application No. 10/540477 is presented for examination by the examiner.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 03/07/2003. Examiner acknowledges the request for the foreign application to be included in the file; however, it has not yet been inserted.

Response to Amendment

Claims 1-22 are pending. Claims 1-3, 5-8, 10-13, and 15-22 have been amended.

Drawings

Amendment to the drawings have been considered and the previous objection has been removed.

Claim Objections

Amendments to the claims have overcome the previous claim objections. However, currently amended claim 22 is objected to because it is an improper dependent to claim 16. Previously claim 22 was an independent claim related to computer readable media. Claim 16 is directed to a method of encryption. For claim 22 to be a proper dependent claim, further limiting its parent claim, it must also be directed

to the method of claim 16 rather than a computer readable medium. Proper correction is required.

Currently filed amendment overcomes the previous rejection under 35 USC 101 with regards to claims 1-15. The amendment to claims 19-21 does not overcome the previous rejection for the reasons below.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 19-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 19-21 are directed to a computer program. The courts have ruled that computer program claims must be stored on computer readable medium and executed by a computer causing the computer to perform the steps of the program in order to satisfy the requirements of 35 USC 101. Each of these claims lack the necessary computer readable storage medium. The program must be embodied or stored on the CRSM to cause the computer to execute the steps of the program.

Amended claim 22, introduces the limitation of a method into the claim's scope. As a result of the additional scope, the focus of the claim shifts to that of a computer-readable storage medium (CRSM) which encompasses steps. Interpreting the claim as such, it must include additional parts to become statutory. The claim's patentable weight is now centered on the manner in which the file is encoded and section of the file rather than the actual CRSM that it is stored on. Therefore, the CRSM must be tied to something which can program the necessary transformation and results because a CRSM by itself can do nothing. It must have a program embodied on it such that when inserted into a computer causes the computer to perform the encoding of the file as specified.

Response to Arguments

Applicant's arguments filed 11/19/08 have been fully considered but they are not persuasive. Applicant has taken the position that Garcia fails to teach the claimed invention on the basis that Garcia encrypts a header which is larger than the original header. After careful analysis of Applicant's arguments and amendments, Examiner respectfully disagrees with Applicant's assertion that prior art Garcia fails to teach the claimed subject matter. Whether or not the encryption of the header of Garcia remains the same size is moot, because this limitation is not present in claims 1, 6, 11, and 16-22. The independent claims of the present application merely call for a second value which is storable within the field of the header. There is no requirement that the size be the same between the first and a second value. For instance, compressed data would still fit in the field even though it is smaller. Furthermore, Examiner finds nothing in the

claim that suggests this value is even encrypted. The claim language recites that the first value is converted to a second value. The second value indicates the encoding method of the data and other information. The claim is broadly reads on any type of change or update to header information. In fact, any prior art which teaches or suggests updating a value in the field of a file header reads on this limitation. A header file incorporating an encryption key, which can be updated to a new key, reads on this limitation as well. Replacing one key for another would read on converting a first value into a second value. The key would presumably be the same size, so it would be storable in that field. If only the key is being changed, there is not need to make the key larger. Furthermore the encryption key does indicate encoding information regarding the encryption of the data. Garcia teaches the process of updating a key in the header of a file in paragraph 138. The independent claims as amended do not support Applicants arguments because those limitations addressed by the arguments are not found in the language of the claims. Therefore Examiner must maintain the previous rejection of the claims as they apply to Garcia.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by

another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by USP 7,380,120 to Garcia.

As per claims 1, 16, and 19, Garcia teaches encrypting (col. 4, lines 20-24) at least one of encoded image data, audio data, and text data, said encrypting apparatus comprising (col. 7, lines 13-14):

a file reading unit operable to obtain a file which has a data section including the encoded image data, audio data, and text data and a header section including a header of the data section (col. 8, lines 51-55);

a data structure holding unit, which is a memory operable to store data access information (col. 8, lines 53-55);

an encrypting unit operable to encrypt at least one of the encoded image data, audio data, and text data included in the data section of the file using data access information from the data structure holding unit [access policies] (column 8, line 54);
a header analyzing unit operable to analyze the header section of the file and to obtain a value [security information] (col. 13, lines 56-60) described in a field that is included in the header section to show an encoding method used for data to be encrypted by said encrypting unit (col. 3, lines 61-64);

a header converting unit operable to convert the obtained a first value according to a predetermined conversion rule [cipher] the second value having a size such that the

second value is storable within the field included in the header section, the second value indicating the encoding method of the encoded data stored in the data section and information converting unit being further operable to replace the first value stored in the field included in the header section with the second value (col. 14, lines 32-36 and col. 25, lines 60-67); and

a file outputting unit operable to output a file having a header section including a field in which the value has been replaced and a data section including the encrypted data (Fig 4A, reference 418).

As per claims 6, 17, and 20 Garcia teaches decrypting encrypted data (col. 4, lines 20-24), the encrypted data being at least one of encoded image data, audio data, and text data, said decrypting apparatus comprising (col. 7, lines 13-14):

a file reading unit operable to obtain a file which has a data section including the encoded image data, audio data, and text data and a header section including a header of the data section(col. 8, lines 51-55);

a header analyzing unit operable to analyze the header section of the file and to obtain value[security information] (col. 13, lines 56-60) described in a field that is included in the header section to show an encoding method used for the encrypted data and information regarding encryption (col. 3, lines 61-64);

a header converting unit operable to convert the obtained a first value according to a predetermined conversion rule [cipher] the second value having a size such that the second value is storable within the field included in the header section, the second

value indicating the encoding method of the encoded data stored in the data section and information converting unit being further operable to replace the first value stored in the field included in the header section with the second value (col. 14, lines 32-36 and col. 25, lines 60-67); and

a decrypting unit operable to decrypt the encrypted data out of the encoded image data, audio data, and the text data included in the data section of the file (Fig 4C, reference 468);

and a file outputting unit operable to output a file having a header section including a field in which the value has been replaced and a data section including the decrypted data (Fig 4C, reference 470).

As per claims 11, 18, and 21 Garcia teaches decrypting and decoding encrypted data for reproduction (col. 4, lines 20-24), the encrypted data being at least one of encoded image data, audio data, and text data, said decrypting apparatus comprising (col. 7, lines 13-14):

a file reading unit operable to obtain a file which has a data section including the encoded image data, audio data, and text data and a header section including a header of the data section(col. 8, lines 51-55);

a header converting unit operable to convert the obtained a first value according to a predetermined conversion rule [cipher] the second value having a size such that the second value is storable within the field included in the header section, the second value indicating the encoding method of the encoded data stored in the data section

and information converting unit being further operable to replace the first value stored in the field included in the header section with the second value (col. 14, lines 32-36 and col. 25, lines 60-67); and

a header converting unit operable to convert the obtained value according to a predetermined conversion rule [cipher] and to replace the value described in the field with the converted value (col. 14, lines 32-36);

a decrypting unit operable to decrypt the encrypted data out of the encoded image data, audio data, and the text data included in the data section of the file (Fig 4C, reference 468);

a decoding unit [authoring tool] operable to determine the encoding method used for the data by reference to the field in which the value has been replaced and to decode the decrypted data (col. 8, lines 25-31).

As per claims 2, 7, and 12 Garcia teaches converting the obtained value through a bit inversion (col. 3, lines 61-64, col. 7, lines 52-55, and col. 19, lines 17-18). It is well known in the art that encrypting data inverts bits.

As per claims 3, 8, and 13 Garcia teaches changing a bit position in the obtained value at which the bit inversion is to be performed, according to an encrypting method used by said encrypting unit (col. 14, lines 32-49). Again it is well known that through encryption/decrypting bits change position.

As per claims 4, 9, and 14 Garcia teaches changing a bit inversion formula [cipher] to be used for the bit inversion, according to an encrypting method used by said

encrypting unit (col. 15, lines 13-14 and col. 16, 9-12). Garcia teaches that the way a file is encrypted can depend on various security factors and different encrypting ciphers can be used based on such factors.

As per claims 5, 10, and 15 Garcia teaches the conversion rule is represented by a conversion table [table / database entries] in which the obtained value is recorded in association with the converted value (col. 3, lines 3-5 and Fig. 5B.2).

As per claim 22, Garcia teaches a computer-readable recording medium on which a file is recorded, said file including:

a data section which includes encrypted data (col. 11, lines 62-64), the encrypted data being at least one of encoded image data, audio data, and text data (col. 7, lines 13-16); and

a header section which includes a header of the data section, wherein the header section includes a field showing an encoding method [cipher] used for the encrypted data and information regarding encryption (col. 3, lines 53-64).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art 2001/0056541 to Matsuzaki et al., teaches updating an encryption key stored in the header of a file.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. VAUGHAN whose telephone number is (571)270-7316. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRV
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Primary Examiner, Art Unit 2431